

# Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income

## New Estimates for 2000 Revised Estimates for 1999

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THIS article presents a comparison of the Bureau of Economic Analysis (BEA) measure of personal income and the Internal Revenue Service (IRS) measure of adjusted gross income (AGI) of individuals by type of income. It explains the major definitional and statistical differences between the two measures, describes some uses of the measures, and presents a partial reconciliation of the measures that is prepared by converting the BEA measure of personal income by type of income to the same definitional basis as the IRS measure. It also discusses the sources of the “AGI gap”—the unexplained difference that remains between the estimates of the BEA AGI and the IRS AGI—the AGI gap for 1959–2000, and the sources of the revision to the AGI gap for 1999.<sup>1</sup>

The BEA measure of personal income and the IRS measure of AGI are both widely used measures of household income. Personal income, which is prepared as an integral part of the national income and product accounts (NIPAs), is often used in assessing trends in output, consumer spending, saving, and investment. AGI, which is an income concept used for Federal income tax, is often used as an input in the estimation of individual income tax revenue and the income tax burden of households.

Personal income is the income received by persons from all sources—that is, from participation in production, from both government and business transfer payments, and from government interest (which is treated like a transfer payment). “Persons” consists of

individuals, nonprofit institutions that primarily serve individuals, private noninsured welfare funds, and private trust funds. Personal income is calculated as the sum of wage and salary disbursements, other labor income, proprietors’ income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance.<sup>2</sup>

AGI is the Federal income tax concept closest to net income. It approximates income less the costs of producing income. In general, gross income for Federal income tax purposes includes all income that is received in the form of money, property, and services that is not explicitly exempt from taxation. Explicitly exempt income includes the cost basis of pension, annuity, or individual retirement account distributions; tax-exempt interest; part of social security and railroad retirement benefits; part of qualified foreign earned income; and part of the gain from sale of principal residence. For 2000, the allowable adjustments to gross income to derive AGI included the deduction for one-half of self-employment tax, contributions to self-employed retirement plans, contributions to individual retirement accounts, alimony paid, and other adjustments.<sup>3</sup>

In general, personal income is a more comprehen-

1. Annual and quarterly estimates of personal income are published monthly in table 2.1 of the national income and product accounts (NIPAs) in the section “BEA Current and Historical Data” of the *SURVEY OF CURRENT BUSINESS* (monthly estimates are shown in table B.1). Estimates of IRS AGI are published annually in *Statistics of Income—Individual Income Tax Returns*. The estimates of the relationship between total personal income and total AGI are presented annually in NIPA table 8.28, most recently for 1998–2000 on page 21 of the September 2002 *SURVEY*. All the estimates are available on BEA’s Web site at <www.bea.gov>. The reconciliation by type of income for 1959–98 is available on request; for information, write to the Government Division (BE–57), Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230.

2. See U.S. Bureau of Economic Analysis, *National Income and Product Accounts of the United States, 1929–97: Volume 1* (Washington, DC: U.S. Government Printing Office, September 2001): M–8.

3. Other adjustments include student-loan interest deduction, medical savings account deduction, moving expenses, self-employed health insurance deduction, penalty on early withdrawal of savings, forestation or reforestation expenses, foreign housing exclusion, repayments of supplemental unemployment compensation, certain expenses of qualified performing artists, contributions to section 501(c)(18) pension plans, deduction for clean-fuel vehicles, employee business expenses of fee-basis State or local government officials, certain chaplains’ contributions to section 403(b) plans, and jury duty pay that was repaid to employers and reported as taxable income. On the IRS form 1040 for 2000, the types of income that had to be reported for the calculation of gross income are shown in lines 7 through 21, and allowable adjustments are shown in lines 23 through 32.

sive measure than AGI. It includes income that is generally taxed, such as wages and salaries, rental income, self-employment earnings, dividends, and interest; income that is partly taxed, such as social security benefit payments; and several types of income that are not taxed, such as tax-exempt interest and nontaxable transfer payments, including Medicare, Medicaid, and welfare benefit payments. Personal income includes income independent of whether it is reported to the IRS. Personal income also includes other types of income, such as employer contributions to private and government employee retirement plans, the investment income of these plans, and imputed income related to home ownership. However, personal income excludes net gains from the sale of assets (capital gains), retirement benefits, and personal contributions for social insurance.

Although the two series are based on different concepts and serve different purposes, they are often used jointly. In particular, estimates of personal income, which are available much sooner than AGI, are frequently used as extrapolators for AGI.

The revised estimates for 1999 reflect the incorporation of the results of the annual revision of the NIPA's that was released in July 2002 and of updated estimates of AGI for 1999 from the *Statistics of Income Bulletin*.<sup>4</sup> The new estimates for 2000 incorporate the newly available IRS estimates of AGI for 2000.

This article is organized into four sections. The first section discusses the derivation of the BEA estimates of AGI and the AGI gap by type of income. The second section discusses the sources of the AGI gap. The third section discusses some specific trends in the AGI gap by type of income for 1959–2000. The fourth section discusses the sources of revision to the AGI gap for 1999.

### BEA Estimates of AGI

Personal income and AGI each include items that the other omits, but AGI is more narrowly defined. Tables 1 and 2 show the reconciliation between personal income and AGI by type of income for 1999–2000. In these tables, the reconciliation items that convert personal income to the IRS definition of AGI are shown in three groups.

The first group (lines 3–9) consists of the portion of personal income that is not included in AGI. Most transfer payments to persons from governments and all transfer payments to persons from business are

nontaxable (line 3).<sup>5</sup> The taxable portion of transfer payments to persons from governments consists primarily of unemployment compensation benefit payments and a portion of social security and railroad retirement benefit payments.

Most of the components of the NIPA category “other labor income” (line 4), primarily so-called fringe benefits, are nontaxable.<sup>6</sup> The nontaxable components are employer payments (including payments in kind) to private pension and profit-sharing plans, to publicly administered government employee retirement plans, to private group health and life insurance plans, to privately administered workers' compensation plans, and to supplemental unemployment benefit plans. Employer payments are nontaxable, but some benefit payments—such as pension benefit payments (line 13) and supplemental unemployment benefit payments (part of line 15) are taxable. Taxable components of other labor income also include other fees and payments.

In the NIPA's, the investment income of life insurance carriers and pension plans is included in personal income in the year it is accrued. Investment income of life insurance carriers attributed to persons is included in personal interest income.<sup>7</sup> Investment income of pension plans—rents, dividends, and interest—is recorded as being received directly by persons in the corresponding components of personal income.

The second group of reconciliation items (lines 11–15) consists of the portion of AGI that is excluded from personal income. Personal contributions for social insurance (line 11) includes payments by employees, by the self-employed, and by individuals who participate in the following government programs: Old-age, survivors, and disability insurance (social security), hospital insurance, supplementary medical insurance, unemployment insurance, railroad retirement, veterans life insurance, and temporary disability insurance.<sup>8</sup>

“Gains, net of losses, from sale of property”—capital gains (line 12)—includes net gain from the sale of property held for personal use or for investment (capital assets) and of property of a business nature (business assets).

4. See Eugene P. Seskin and Stephanie H. McCulla, “Annual Revision of the National Income and Product Accounts: Annual Estimates, 1999–2001 and Quarterly Estimates, 1999:I–2002:I,” *SURVEY* 82 (August 2002): 7–34. For AGI data, see Internal Revenue Service, *Statistics of Income Bulletin* (Washington, DC: U.S. Government Printing Office, Winter 2001–2002).

5. NIPA table 3.12 shows government transfer payments to persons, which include benefit payments from social insurance funds—such as old-age, survivors, and disability insurance (social security), hospital insurance, supplementary medical insurance, and unemployment insurance—and from certain other programs. NIPA table 8.16 shows business transfer payments to persons, which consist primarily of automobile insurance and medical malpractice insurance payments to persons by business and of donations by corporate business to nonprofit institutions serving individuals.

6. NIPA table 6.11C shows other labor income by industry group and by type.

7. See NIPA table 8.20 (line 53).

8. See NIPA table 3.6.

Taxable pension benefit payments from pension plans (line 13), which is in AGI, is excluded from personal income because in the NIPA's, pension benefit payments are treated as transactions within the personal sector.

The third group of reconciliation items (lines 17–21 and 25–27) consists of reallocations among types of income. These reallocations do not affect the total AGI gap, but they affect the AGI gap by type of income. The types of income used for reconciliation purposes in tables 1 and 2 represent the types of income that are common to both personal income and AGI. However, certain types of personal income and of AGI, such as interest distributed by regulated investment companies—mutual funds—(line 20) and partnership income (line 26), are classified differently in the two income measures. These income types are reallocated, when possible, to make the BEA and IRS estimates of

AGI comparable by type of income. The reallocations of personal income types are shown in lines 17–21, and the reallocation of AGI types are shown in lines 25–27.

Taxable interest received by mutual funds is reallocated from NIPA personal interest income to AGI personal dividend income because the IRS requires that this interest be reported as dividends. Only the portion that is taxable to individuals is reallocated; the interest paid by mutual funds to pension plans, IRA and Keogh plans, and holders of State and local government securities is tax-exempt.<sup>9</sup> Because of the difficulties of allo-

9. Estimates of taxable interest received by individuals from mutual funds are primarily based on IRS tabulations of U.S. Income Tax Return for Regulated Investment Companies (form 1120 RIC). The form 1120 RIC distributions are adjusted for distributions currently not taxable to individuals using the mutual fund shares from the Federal Reserve Board. For more information on the reconciliation items in tables 1 and 2, see Thae S. Park, "Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income," SURVEY 80 (February 2000): 18.

Table 1. Comparison of Personal Income with AGI by Type of Income, 1999

[Billions of dollars]

Line		Personal income											Income not included in personal income
		Total	Wage and salary disbursements	Proprietors' income with IVA and CCAAdj		Rental income of persons with CCAAdj	Personal dividend income	Personal interest income	Taxable pensions and annuities	Taxable unemployment compensation	Taxable social security benefits <sup>1</sup>	Other personal income <sup>2</sup>	
				Farm	Nonfarm								
1	Personal income .....	7,786.5	4,470.4	27.7	650.7	149.1	328.0	969.2	3.0	20.7	82.0	1,085.6	0.0
2	Less: Portion of personal income not included in adjusted gross income .....	2,726.5	108.4	5.2	1.7	110.8	246.2	777.4	0.0	0.0	0.0	1,420.1	56.7
3	Nontaxable transfer payments .....	911.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	911.8	0.0
4	Other labor income except fees .....	507.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	507.4	0.0
5	Imputed income in personal income <sup>4</sup> .....	343.5	11.4	0.5	7.7	90.2	0.0	233.8	0.0	0.0	0.0	0.0	0.0
6	Investment income retained by life insurance carriers and pension plans <sup>5</sup> .....	431.2	0.0	0.0	0.0	1.3	51.3	378.5	0.0	0.0	0.0	0.0	0.0
7	Investment income received by nonprofit institutions or retained by fiduciaries .....	68.8	0.0	0.0	0.4	6.7	20.8	40.0	0.0	0.0	0.0	0.8	0.0
8	Differences in accounting treatment between NIPA's and tax regulations, net .....	101.6	0.0	4.8	-6.4	12.6	18.0	72.6	0.0	0.0	0.0	0.0	0.0
9	Other personal income exempt or excluded from adjusted gross income .....	362.3	97.0	0.0	0.0	0.0	156.1	52.5	0.0	0.0	0.0	0.0	<sup>6</sup> 56.7
10	Plus: Portion of adjusted gross income not included in personal income .....	1,502.5	22.3	0.0	4.1	3.1	0.0	0.0	383.3	0.0	0.0	336.4	753.3
11	Personal contributions for social insurance .....	337.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	337.4	0.0
12	Gains, net of losses, from sale of property .....	541.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	541.0
13	Taxable pensions <sup>7</sup> .....	383.3	0.0	0.0	0.0	0.0	0.0	0.0	383.3	0.0	0.0	0.0	0.0
14	Small business corporation income .....	127.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.4
15	Other types of income .....	113.3	22.3	0.0	4.1	3.1	0.0	0.0	0.0	0.0	0.0	-1.0	84.8
16	Plus: Reallocation by type of NIPA income .....	10.9	.....	.....	-0.8	.....	48.3	-48.3	-8.1	.....	.....	-1.9	.....
17	Fees in other labor income .....	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	0.0
18	Fiduciaries' share of partnership income <sup>8</sup> .....	0.0	0.0	0.0	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
19	Interest received by nonfarm proprietors .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Interest distributed by regulated investment companies .....	0.0	0.0	0.0	0.0	0.0	48.3	-48.3	0.0	0.0	0.0	0.0	0.0
21	Taxable disability income payments .....	0.0	8.1	0.0	0.0	0.0	0.0	0.0	-8.1	0.0	0.0	0.0	0.0
22	Equals: BEA-derived adjusted gross income .....	6,562.4	4,395.2	22.5	652.2	41.4	130.1	143.5	378.1	20.7	82.0	0.0	696.6
23	Adjusted gross income of IRS (as reported) .....	5,855.5	4,132.5	-6.2	208.4	25.6	132.5	175.7	304.3	17.5	75.1	93.6	696.6
24	Plus: Reallocation by type of IRS income .....	.....	.....	0.5	86.5	6.6	.....	.....	.....	.....	.....	-93.6	.....
25	Estate or trust income .....	0.0	0.0	0.0	3.3	6.6	0.0	0.0	0.0	0.0	0.0	-9.9	0.0
26	Partnership income .....	0.0	0.0	0.5	83.2	0.0	0.0	0.0	0.0	0.0	0.0	-83.7	0.0
27	Other reallocations .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Adjusted gross income of IRS (reallocated) .....	5,855.5	4,132.5	-5.8	294.9	32.2	132.5	175.7	304.3	17.5	75.1	0.0	696.6
29	Adjusted gross income gap (line 22 - line 28) .....	707.0	262.7	28.3	357.3	9.2	-2.4	-32.2	73.8	3.2	6.9	0.0	0.0
30	Percent distribution of AGI gap .....	100.0	37.2	4.0	50.5	1.3	-0.3	-4.6	10.4	0.5	1.0	.....	.....
31	Relative AGI gap <sup>9</sup> .....	10.8	6.0	125.7	54.8	22.2	-1.8	-22.4	19.5	15.5	8.4	.....	.....
32	Addendum: Misreporting adjustments included in personal income .....	370.1	103.8	.....	278.5	1.3	.....	-13.5	.....	.....	.....	.....	.....

See the footnotes at the end of table 2.

cating total interest paid by regulated investment companies to these categories, this estimate of the amount reallocated from interest to dividends is an approximation; the separate estimates of BEA-derived AGI for interest and for dividends are therefore less reliable than the combined estimates.

Partnership income as reported in AGI requires a reallocation by type of income. The current-production income (including income in kind) of sole proprietorships and partnerships and of tax-exempt cooperatives is classified either as farm proprietors' income or as nonfarm proprietors' income for reconciliation purposes.

### The AGI Gap

The estimates of the BEA-derived AGI differ significantly from the IRS estimates of AGI. The "AGI gap" is defined as the difference between the total BEA-derived AGI (line 22) and total IRS AGI (line 23), and the AGI gap for each type of income (line 29) is the difference between the BEA-derived AGI for that type of income (line 22) and the reallocated IRS AGI for that type of income (line 28). The percent distribution of the AGI gap by type of income is shown in line 30, and the relative AGI gap for each type of income, which is the AGI gap for that type of income (line 29) as a per-

Table 2. Comparison of Personal Income with AGI by Type of Income, 2000  
[Billions of dollars]

Line		Personal income											Income not included in personal income
		Total	Wage and salary disbursements	Proprietors' income with IVA and CCAdj		Rental income of persons with CCAdj	Personal dividend income	Personal interest income	Taxable pensions and annuities	Taxable unemployment compensation	Taxable social security benefits <sup>1</sup>	Other personal income <sup>2</sup>	
				Farm	Nonfarm								
1	Personal income .....	8,406.6	4,836.3	22.6	692.2	146.6	375.7	1,077.0	3.0	21.1	98.9	1,133.1	0.0
2	Less: Portion of personal income not included in adjusted gross income.....	2,895.0	119.7	7.2	-4.0	112.9	271.3	842.9	0.0	0.0	0.0	1,488.4	56.6
3	Nontaxable transfer payments .....	946.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	946.2	0.0
4	Other labor income except fees .....	541.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	541.3	0.0
5	Imputed income in personal income <sup>4</sup> .....	370.6	11.8	0.5	8.1	92.1	0.0	258.1	0.0	0.0	0.0	0.0	0.0
6	Investment income retained by life insurance carriers and pension plans <sup>5</sup> .....	469.6	0.0	0.0	0.0	1.3	59.4	408.8	0.0	0.0	0.0	0.0	0.0
7	Investment income received by nonprofit institutions or retained by fiduciaries.....	66.0	0.0	0.0	0.4	6.2	19.2	39.2	0.0	0.0	0.0	0.8	0.0
8	Differences in accounting treatment between NIPA's and tax regulations, net.....	107.2	0.0	6.7	-12.6	13.2	17.3	82.6	0.0	0.0	0.0	0.0	0.0
9	Other personal income exempt or excluded from adjusted gross income.....	394.1	107.9	0.0	0.0	0.0	175.4	54.2	0.0	0.0	0.0	0.0	<sup>6</sup> 56.6
10	Plus: Portion of adjusted gross income not included in personal income.....	1,610.8	23.8	0.0	4.4	3.3	0.0	0.0	412.8	0.0	0.0	357.2	809.4
11	Personal contributions for social insurance.....	358.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	358.4	0.0
12	Gains, net of losses, from sale of property .....	573.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	573.6
13	Taxable pensions <sup>7</sup> .....	412.8	0.0	0.0	0.0	0.0	0.0	0.0	412.8	0.0	0.0	0.0	0.0
14	Small business corporation income.....	119.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.8
15	Other types of income.....	146.3	23.8	0.0	4.4	3.3	0.0	0.0	0.0	0.0	0.0	-1.1	115.9
16	Plus: Reallocation by type of NIPA income .....		11.1		-0.8		61.7	-61.7	-8.3			-2.0	
17	Fees in other labor income.....	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	0.0
18	Fiduciaries' share of partnership income <sup>8</sup> .....	0.0	0.0	0.0	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
19	Interest received by nonfarm proprietors.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Interest distributed by regulated investment companies.....	0.0	0.0	0.0	0.0	0.0	61.7	-61.7	0.0	0.0	0.0	0.0	0.0
21	Taxable disability income payments.....	0.0	8.3	0.0	0.0	0.0	0.0	0.0	-8.3	0.0	0.0	0.0	0.0
22	Equals: BEA-derived adjusted gross income .....	7,122.4	4,751.6	15.3	699.8	37.0	166.1	172.4	407.5	21.1	98.9	0.0	752.8
23	Adjusted gross income of IRS (as reported).....	6,330.6	4,494.5	-8.2	207.2	28.1	142.2	185.3	331.5	17.0	91.6	88.5	752.8
24	Plus: Reallocation by type of IRS income .....				82.1	6.4		0.0				-88.5	
25	Estate or trust income.....	0.0	0.0	0.0	3.4	6.4	0.0	0.0	0.0	0.0	0.0	-9.9	0.0
26	Partnership income.....	0.0	0.0	0.0	78.7	0.0	0.0	0.0	0.0	0.0	0.0	-78.7	0.0
27	Other reallocations.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Adjusted gross income of IRS (reallocated).....	6,330.6	4,494.5	-8.2	289.4	34.5	142.2	185.3	331.5	17.0	91.6	0.0	752.8
29	Adjusted gross income gap (line 22 – line 28) .....	791.9	257.1	23.5	410.5	2.5	23.9	-12.9	76.0	4.1	7.3	0.0	0.0
30	Percent distribution of AGI gap .....	100.0	32.5	3.0	51.8	0.3	3.0	-1.6	9.6	0.5	0.9		
31	Relative AGI gap <sup>9</sup> .....	11.1	5.4	153.2	58.7	6.7	14.4	-7.5	18.7	19.5	7.4		
32	Addendum: Misreporting adjustments included in personal income.....	401.4	112.9		303.5	1.4		-16.3					

1. Taxable social security benefits also include the social security equivalent benefit portion of tier 1 railroad retirement benefits.

2. Consists primarily of other labor income and the nontaxable transfer payments to persons, less personal contributions for social insurance.

3. Consists of tier 2 railroad retirement benefits that are taxed in the same manner as benefits paid under private employer retirement plans.

4. Consists of the imputations included in personal income shown in NIPA table 8.21 (line 53), except for employer contributions for health and life insurance premiums (line 146). In this table, these premiums are included in line 4.

5. Consists of imputed interest received by persons from life insurance carriers shown in NIPA table 8.20 (line 53) and investment income of private and government employee pension plans.

6. Statutory adjustments or specific adjustments ("above-the-line deductions") from total income taken to

arrive at AGI.

7. Consists of the taxable portion of private and government employee retirement plan benefit payments.

8. Consists of partnership income retained by fiduciaries.

9. Adjusted gross income gap (line 29) as a percentage of the BEA-derived AGI (line 22).

AGI Adjusted gross income

BEA Bureau of Economic Analysis

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

IRS Internal Revenue Service

NIPA's National income and product accounts

centage of the BEA-derived AGI for that type of income (line 22), is shown in line 31.

The AGI gap results from several sources. First, the source data used to estimate personal income and its components contain errors, and data are unavailable to estimate some items, such as income earned by individuals who are not required to file income tax returns.<sup>10</sup> Some of the differences between the definitions of personal income and AGI are unknown.

Second, the IRS estimates of total AGI and its components are affected by sampling and measurement errors. The IRS estimates are based on a stratified probability sample of unaudited individual income tax returns that are not adjusted for misreporting (however, the sample returns are edited for consistent statistical definitions and for incorrect or missing entries in order to make them consistent with other entries on the returns and with accompanying schedules).

Third, the estimates of BEA-derived AGI include both explicit and implicit adjustments for tax-return misreporting.<sup>11</sup> Explicit adjustments are made for the effects of tax-return misreporting on the source data used to prepare the estimates of wage and salary disbursements, nonfarm proprietors' income, royalty income, and personal interest income (line 32).<sup>12</sup> Implicit adjustments are also embedded in the source data used for some components of personal income because the source data are from Government administrative records other than the individual income-tax return information system. For example, the estimates of wage and salary disbursements are based on tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics, on wages from the Office of Personnel Management, and on wages from a variety of other sources; these estimates are then adjusted for coverage differences. Personal dividend income is based primarily on tabulations of corporate income tax returns, adjusted for understatement of income on tax returns and for conceptual differences. Transfer payments are

based on budget data from the Federal Government and from State and local governments rather than on individual tax return data.<sup>13</sup>

Fourth, each July, the personal income estimates for the most recent 3 years are revised to incorporate source data that are more complete, more detailed, and otherwise more appropriate than those that were previously incorporated, and every 4–5 years, the estimates for all years are subject to a comprehensive revision that incorporates substantial definitional and statistical changes.<sup>14</sup> The IRS estimates of AGI are based on a sample from all individual income tax returns, except tentative and amended returns, processed during a calendar year.<sup>15</sup> The AGI estimates are intended to represent all the returns filed for a tax liability year from January 1 to December 31, but about 2 to 3 percent of the returns processed in a calendar year are for tax liability years ending other than on December 31 or for previous years. Unlike personal income, AGI estimates are not updated to incorporate newly available data.

12. The major source data for these adjustments were the 1988 Taxpayer Compliance Measurement Program (TCMP) and Census Bureau "exact match" files for 1996. The TCMP provided a measure of noncompliance for individuals who file tax returns. Through the TCMP, the IRS developed noncompliance ratios. Explicit adjustments for misreporting on tax returns for nonfarm proprietors' income were determined by multiplying noncompliance ratios times IRS tabulations of levels of business net income as reported on tax returns. The IRS compiled these net income tabulations annually, but noncompliance ratios have been held constant since 1988, the last year for which there was a TCMP. Exact match studies provided data on persons who did not file income tax returns. Nonfiler adjustments were based on matching information supplied on the annual income supplement of the Current Population Survey (CPS) with individual income tax returns. Respondents who reported income on the CPS but who could not be matched to a tax return were considered nonfilers. The latest nonfiler adjustments were based on Census Bureau tabulations of unreported income from the 1996 Exact Match Study.

For additional information about the calculation of these adjustments, see Robert P. Parker, "Improved Adjustments Misreporting of Tax Return Information Used To Estimate the National Income and Product Accounts, 1977" *SURVEY* 64 (June 1984): 17–25; "The Comprehensive Revision of the U.S. National Income and Product Accounts: A Review of Revisions and Major Statistical Changes," *SURVEY* 71 (December 1991): 39–40; "Improved Estimates of the National Income and Product Accounts for 1959–95: Results of the Comprehensive Revision," *SURVEY* 76 (January/February 1996): 24–25; and Brent R. Moulton, Eugene P. Seskin, and David F. Sullivan, "Annual Revision of the National Income and Product Accounts," *SURVEY* 81 (August 2001): 27.

13. Information from IRS audit studies shows misreporting of these payments on individual income tax returns.

14. For major improvements that were introduced in the most recent comprehensive revision, see Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts," *SURVEY* 79 (August 1999): 7–20.

15. According to the IRS, tentative returns, which are mostly estimated returns filed by those who couldn't file their returns by the due date, are excluded from the population because the revised returns may have been sampled later, and amended returns are excluded because the original returns have already been subjected to sampling. A small percentage of returns are not identified as tentative or amended until after sampling; these returns, along with those that contained no income information, are excluded in calculating estimates. For more details, see *Statistics of Income—Individual Income Tax Returns 1998: 19*.

10. Although some individuals who are not required to file tax returns do so mostly to secure refunds of withheld income tax or to receive refunds from earned income tax credit or child tax credit, income earned by low-income individuals who are not required to file returns is probably the largest known missing reconciliation item. The filing requirements are generally based on gross income, filing status, marital status, age, and to a lesser extent, on dependency and blindness.

11. The estimates of personal income are mainly based on source data from the payers of the income. AGI data are used only for the estimates of nonfarm sole proprietors' income and royalty payments in rental income of persons. For these components, BEA adjusts for misreporting of tax return information by taxpayers. Thus, the AGI gap for these components largely reflects the explicit misreporting adjustments (line 32 in tables 1 and 2) added to the source data. See "Updated Summary NIPA Methodologies," *SURVEY* 82 (October 2002): 29–32 and the text on the CD-ROM *State Personal Income, 1929–2000*. Information on methodology is also available on BEA's Web site.

### The AGI Gap by Type of Income for 1959–2000

Table 3 shows the estimates of the AGI gap for total income and for each type of income for 1959–2000, and table 4 shows the relative AGI gap for total income and for each type of income for 1959–2000. Over this period, the relative AGI gap for total income averaged about 11 percent, ranging from a low of about 9 percent in the late 1960s to a high of 13 ½ percent in 1984.

By type of income, the relative AGI gap for wage and salary disbursements is the smallest, primarily because income tax withholding at the source is required for most wage and salary disbursements. Over the period, the relative AGI gap for wage and salary disbursements averaged about 3 percent; since the mid-1980s, the trend has been generally upward.

The trends in the relative AGI gaps for nonwage incomes differ (see the addenda in table 4). For nonwage incomes subject to the requirements for filing information returns by employers, the combined relative

AGI gap declined from about 39 percent in 1959 to about 11 percent in 2000.<sup>16</sup> For incomes not subject to the filing requirements (the second addenda item in table 4), the combined relative AGI gap increased from

16. Employers and other payers of income, including partnerships and nonprofit organizations, are required to file information returns with the IRS for certain payments made during the year in the course of the employers' trade or business. Personal dividend income and personal interest income are the primary examples of nonwage incomes subject to the requirements for filing information returns. In recent years, estimating the AGI gap for these types of income has been difficult because the taxable portion of interest received by individuals from mutual funds is reallocated from personal interest income to personal dividend income (line 19 in tables 1 and 2), because the allocation of income received from private noninsured pension plans (part of line 6) between interest and dividends is based on incomplete data, and because some individuals may have inadvertently reported income from mutual funds as interest rather than as dividends on their tax returns. Thus, tables 3 and 4 show the AGI gap for personal dividend and personal interest income combined and the AGI gaps for each of these types of income. Beginning with 1984, taxes have been withheld on taxable pension benefit payments unless the recipient elects not to have the tax withheld and on interest and dividends if the recipient fails to furnish a correct taxpayer identification number or has interest or dividends that were underreported on past returns.

Table 3. The BEA and IRS Measures of AGI and the AGI Gap by Type of Income, 1959–2000

[Billions of dollars]

Year	BEA-derived AGI	IRS AGI	AGI gap	Wage and salary disbursements	Proprietors' income with IVA and CCAAdj		Rental income of persons with CCAAdj	Personal dividend and personal interest income			Taxable pension and annuities	Taxable unemployment compensation	Taxable social security benefits
					Farm	Nonfarm		Total	Personal dividend income	Personal interest income			
1959.....	339.1	305.1	34.0	7.7	7.1	9.7	-0.1	7.9	0.8	7.1	1.7	0.0	0.0
1960.....	351.4	315.5	36.0	8.8	6.4	10.1	0.0	8.7	1.2	7.6	1.9	0.0	0.0
1961.....	365.8	329.9	36.0	7.5	5.6	11.5	0.4	8.9	1.2	7.7	2.1	0.0	0.0
1962.....	387.8	348.7	39.1	9.1	6.2	11.8	0.4	9.4	1.2	8.2	2.2	0.0	0.0
1963.....	409.2	368.8	40.4	8.3	7.0	12.6	0.7	9.4	1.3	8.1	2.4	0.0	0.0
1964.....	442.2	396.7	45.6	10.2	6.3	14.1	0.8	11.4	2.0	9.5	2.8	0.0	0.0
1965.....	479.8	429.2	50.6	11.7	7.1	14.2	1.2	13.3	2.3	11.0	3.2	0.0	0.0
1966.....	521.7	468.5	53.3	13.5	7.3	15.9	1.0	12.0	0.5	11.5	3.5	0.0	0.0
1967.....	555.4	504.8	50.6	11.0	5.7	16.6	0.9	12.4	0.5	11.9	4.0	0.0	0.0
1968.....	609.3	554.4	54.9	13.6	5.5	17.0	0.7	13.7	0.9	12.9	4.3	0.0	0.0
1969.....	663.3	603.5	59.7	12.4	7.7	18.7	0.7	15.2	0.7	14.5	5.0	0.0	0.0
1970.....	699.3	631.7	67.6	13.1	9.3	20.5	0.9	17.7	1.0	16.7	6.1	0.0	0.0
1971.....	744.8	673.6	71.2	13.3	8.3	23.7	0.8	18.3	1.4	16.9	7.1	0.0	0.0
1972.....	825.5	746.0	79.5	10.8	10.9	28.8	1.6	19.2	2.0	17.2	8.2	0.0	0.0
1973.....	926.1	827.1	99.0	16.4	16.7	32.2	1.5	23.5	3.4	20.1	8.6	0.0	0.0
1974.....	1,005.4	905.5	99.8	8.8	17.8	38.1	0.4	25.2	2.7	22.5	9.5	0.0	0.0
1975.....	1,048.0	947.8	100.2	13.6	12.6	42.2	0.1	21.1	1.0	20.0	10.7	0.0	0.0
1976.....	1,169.1	1,053.9	115.2	13.2	11.7	53.6	-0.4	25.3	3.8	21.5	11.8	0.0	0.0
1977.....	1,297.6	1,158.5	139.1	19.3	9.9	61.3	1.8	34.5	6.2	28.3	12.3	0.0	0.0
1978.....	1,469.6	1,302.4	167.1	24.7	13.0	73.5	2.2	38.9	7.3	31.6	14.9	0.0	0.0
1979.....	1,658.5	1,465.4	193.1	19.7	15.3	84.6	3.9	50.6	9.2	41.4	18.5	0.4	0.0
1980.....	1,831.6	1,613.7	217.9	21.3	19.6	89.2	7.1	56.5	12.5	44.1	23.4	0.8	0.0
1981.....	2,016.3	1,772.6	243.7	21.0	21.3	90.5	12.5	68.7	22.4	46.3	28.8	0.9	0.0
1982.....	2,094.7	1,852.1	242.6	16.5	17.5	95.5	15.5	62.1	18.4	43.7	33.5	2.0	0.0
1983.....	2,225.7	1,942.6	283.1	23.5	29.5	109.9	15.6	62.7	23.4	39.3	39.3	2.6	0.0
1984.....	2,473.3	2,139.9	333.4	27.5	28.8	141.4	19.9	62.7	28.9	33.7	47.2	1.3	4.6
1985.....	2,629.9	2,306.0	323.9	41.8	25.0	147.2	22.4	34.8	22.1	12.7	48.2	1.4	3.2
1986.....	2,848.3	2,481.7	366.6	55.1	29.5	147.2	19.5	45.3	19.7	25.6	65.7	1.2	3.1
1987.....	3,125.4	2,773.8	351.6	76.3	32.6	121.6	15.1	45.7	27.5	18.1	55.0	2.6	2.8
1988.....	3,415.8	3,083.0	332.8	80.0	36.6	122.9	8.3	37.9	23.1	14.8	42.4	1.9	2.8
1989.....	3,658.6	3,256.4	402.3	108.2	31.0	127.4	3.9	71.6	40.9	30.7	54.8	2.4	3.0
1990.....	3,813.2	3,405.4	407.8	112.8	28.4	134.4	4.4	67.4	42.0	25.4	54.3	2.8	3.0
1991.....	3,864.4	3,464.5	399.9	100.4	30.9	139.3	7.4	65.3	43.8	21.5	49.8	3.6	3.2
1992.....	4,108.3	3,629.1	479.2	127.3	32.4	165.1	12.0	72.9	32.7	40.2	56.6	8.3	4.5
1993.....	4,260.0	3,723.3	536.7	145.4	39.0	200.5	10.1	71.5	31.6	39.9	56.7	7.3	6.1
1994.....	4,485.7	3,907.5	578.2	154.3	28.5	223.5	12.7	84.0	50.5	33.5	63.4	3.9	8.0
1995.....	4,766.4	4,189.4	577.0	162.8	37.3	246.4	15.5	35.9	35.2	0.7	67.7	2.6	8.8
1996.....	5,151.6	4,536.0	615.6	188.0	32.1	278.1	13.4	24.5	45.4	-20.9	69.2	3.2	7.2
1997.....	5,594.3	4,970.0	624.3	208.6	30.6	292.9	12.0	0.2	48.4	-48.3	70.4	3.2	6.5
1998.....	6,123.7	5,416.0	707.7	242.2	26.8	314.3	11.5	36.6	46.5	-9.9	70.9	3.1	2.3
1999.....	6,562.4	5,855.5	707.0	262.7	28.3	357.3	9.2	-34.5	-2.4	-32.2	73.8	3.2	6.9
2000.....	7,122.4	6,330.6	791.9	257.1	23.5	410.5	2.5	10.9	23.9	-12.9	76.0	4.1	7.3

AGI Adjusted gross income  
BEA Bureau of Economic Analysis  
IRS Internal Revenue Service

about 32 percent in 1959 to a high of 80 percent in 1984 and then fell sharply in the late 1980s to about 50 percent. It was 58 percent in 2000.

### Sources of the Revision to the AGI Gap for 1999

Table 5 shows the revisions to personal income, reconciliation items, BEA-derived AGI, AGI of IRS, and the AGI gap for 1999. The AGI gap was revised up \$32.2 billion for 1999 (line 29), raising the relative AGI gap by 0.2 percentage point (line 31).

The \$32.2 billion upward revision to the AGI gap reflected an upward revision of \$36.1 billion to the BEA-derived AGI (line 22) that was partly offset by an upward revision of \$3.9 billion to total AGI (line 23).

The \$36.1 billion upward revision to the BEA-derived AGI was attributable to the following: An upward

revision of \$2.9 billion to personal income that was carried through to the BEA-derived AGI, an upward revision of \$6.3 billion to reconciliation items unrelated to personal income, and an upward revision of \$26.9 billion to AGI components.

Of the \$9.2 billion upward revision to personal income (line 1), \$6.3 billion did not carry through to the BEA-derived AGI. These revisions, such as the revisions to other labor income (line 4) and to imputed income (line 5), resulted in offsetting revisions to the reconciliation items that are related to personal income.

The revisions to the reconciliation items unrelated to personal income or to AGI were all carried through to the BEA-derived AGI. Nontaxable transfer payments (line 3) and investment income of life insurance carriers and pension plans (line 6) are examples of

Table 4. The Relative AGI Gap by Type of Income, 1959–2000  
[Percent]

Year	Total	Wage and salary disbursements	Proprietors' income with IVA and CCAAdj		Rental income of persons with CCAAdj	Personal dividend and personal interest income			Taxable pension and annuities	Taxable unemployment compensation	Taxable social security benefits	Addenda	
			Farm	Nonfarm		Total	Personal dividend income	Personal interest income				The sum of income items except wages, subject to the requirements for filing information returns <sup>1</sup>	The sum of income items not subject to the requirements for filing information returns <sup>2</sup>
1959.....	10.0	3.0	68.9	25.6	-2.2	36.5	7.6	61.8	53.3	0.0	0.0	38.6	32.4
1960.....	10.2	3.3	66.1	27.1	1.0	37.4	10.8	60.0	54.1	0.0	0.0	39.6	32.7
1961.....	9.8	2.7	59.0	29.1	10.1	36.3	10.7	57.5	53.5	0.0	0.0	38.7	33.0
1962.....	10.1	3.1	61.5	28.4	9.3	34.5	10.3	53.3	48.5	0.0	0.0	36.5	33.1
1963.....	9.9	2.7	68.0	29.5	17.0	31.2	9.9	46.8	47.4	0.0	0.0	33.6	35.4
1964.....	10.3	3.0	66.6	30.1	19.0	34.1	14.1	48.3	47.2	0.0	0.0	36.1	35.1
1965.....	10.5	3.3	63.8	28.8	25.8	35.5	15.1	49.4	47.0	0.0	0.0	37.2	34.5
1966.....	10.2	3.4	60.6	30.2	21.6	30.7	3.4	46.6	44.0	0.0	0.0	32.9	34.9
1967.....	9.1	2.6	59.3	29.8	19.8	29.9	3.2	44.5	44.2	0.0	0.0	32.4	33.2
1968.....	9.0	2.9	59.2	28.6	15.9	30.0	5.5	43.4	41.8	0.0	0.0	32.2	31.6
1969.....	9.0	2.4	64.6	30.5	15.0	30.1	4.5	42.5	42.1	0.0	0.0	32.4	34.9
1970.....	9.7	2.4	73.0	32.9	19.0	31.9	6.2	43.1	43.5	0.0	0.0	34.2	38.5
1971.....	9.6	2.3	75.5	35.3	15.9	31.2	8.4	40.5	43.2	0.0	0.0	33.8	39.5
1972.....	9.6	1.7	69.1	38.6	25.2	30.2	10.6	38.5	42.8	0.0	0.0	33.2	42.7
1973.....	10.7	2.3	65.7	39.7	20.2	31.6	15.3	38.5	39.5	0.0	0.0	33.4	44.3
1974.....	9.9	1.1	73.8	43.2	6.4	29.5	11.5	36.3	36.2	0.0	0.0	31.0	47.3
1975.....	9.6	1.7	72.7	45.5	1.8	24.4	4.6	31.5	33.9	0.0	0.0	26.9	47.1
1976.....	9.9	1.5	72.2	48.6	-6.8	25.8	13.6	30.7	32.4	0.0	0.0	27.5	48.7
1977.....	10.7	2.0	89.7	49.1	21.8	29.7	18.7	34.1	29.6	0.0	0.0	29.7	50.6
1978.....	11.4	2.2	73.2	51.6	22.9	29.9	19.5	34.0	31.3	0.0	0.0	30.3	52.3
1979.....	11.6	1.6	83.9	54.7	37.0	32.0	21.6	35.9	33.1	30.7	0.0	32.3	56.5
1980.....	11.9	1.6	106.8	57.4	52.5	28.7	24.3	30.2	35.1	27.0	0.0	30.2	61.9
1981.....	12.1	1.4	156.2	62.5	69.6	27.8	32.7	26.0	35.7	27.3	0.0	29.8	70.4
1982.....	11.6	1.0	228.1	64.8	81.1	22.9	26.1	21.8	35.8	21.8	0.0	26.1	73.8
1983.....	12.7	1.4	146.4	64.5	97.1	23.7	32.5	20.4	36.0	27.1	0.0	27.3	75.0
1984.....	13.5	1.5	198.6	68.0	123.7	21.8	37.3	16.1	37.0	17.8	36.7	26.6	79.7
1985.....	12.3	2.1	202.5	66.2	134.2	12.8	28.6	6.5	33.6	17.6	25.0	20.1	77.4
1986.....	12.9	2.6	135.4	64.7	190.6	16.5	24.2	13.2	37.9	15.0	22.6	24.5	75.6
1987.....	11.2	3.4	102.0	51.9	139.4	16.2	29.2	9.7	30.6	17.2	18.1	21.6	61.1
1988.....	9.7	3.3	101.0	45.2	83.4	12.6	23.0	7.4	23.4	13.9	16.4	16.5	52.7
1989.....	11.0	4.2	96.2	44.3	51.2	19.2	33.4	12.2	27.1	16.8	14.6	21.6	49.6
1990.....	10.7	4.2	96.2	43.9	39.7	18.0	34.4	10.1	25.4	15.5	13.2	20.3	48.2
1991.....	10.3	3.6	105.0	44.6	47.9	18.5	36.2	9.3	22.0	13.5	13.1	19.4	49.7
1992.....	11.7	4.3	103.7	46.1	48.5	23.3	29.5	19.9	23.3	21.0	16.2	22.8	50.6
1993.....	12.6	4.8	107.7	50.4	37.4	25.3	28.4	23.3	22.6	21.0	19.9	23.7	54.2
1994.....	12.9	4.8	132.2	51.6	38.7	28.7	38.0	21.0	23.6	16.0	17.2	25.2	54.3
1995.....	12.1	4.8	125.5	53.2	41.6	12.6	27.1	0.5	23.4	11.9	16.2	17.7	56.4
1996.....	12.0	5.3	126.8	54.1	33.8	8.3	30.3	-14.4	22.5	14.3	12.0	15.2	55.9
1997.....	11.2	5.5	126.0	53.6	29.9	0.1	28.7	-39.1	21.3	15.5	9.5	11.3	55.0
1998.....	11.6	5.9	140.5	53.1	28.4	11.0	28.2	-5.9	20.2	15.5	3.3	14.6	54.1
1999.....	10.8	6.0	125.7	54.8	22.2	-12.6	-1.8	-22.4	19.5	15.5	8.4	6.6	55.1
2000.....	11.1	5.4	153.2	58.7	6.7	3.2	14.4	-7.5	18.7	19.5	7.4	11.4	58.0

1. Consists of personal dividend income, personal interest income, taxable pensions, taxable unemployment compensation, and taxable social security benefits. These types of income have been subject to varying degrees of withholding since 1984.

2. Consists of farm proprietors' income, nonfarm proprietors' income, and rental income of persons.

Note. The relative AGI gap is the AGI gap as a percentage of the BEA-derived AGI and is shown in line 31 of

tables 1 and 2.

AGI Adjusted gross income

BEA Bureau of Economic Analysis

CCAAdj Capital consumption adjustment

reconciliation items unrelated to revision to personal income.<sup>17</sup>

Revisions to AGI components (part of line 9 and lines 12, 14, and 15) were all carried through to the BEA-derived AGI. Capital gains and small business corporation income are examples of AGI components that are added, without adjustments, to personal income in the derivation of the BEA-derived AGI.

The \$3.9 billion upward revision to total AGI (line 23), which resulted from the replacement of preliminary tabulations with final tabulations, reflected revisions to all AGI components including the components added, without adjustments, to personal income in the derivation of the BEA-derived AGI.

17. The reconciliation items shown in lines 3, 6, 7, and 9 are components of personal income, but they are derived in aggregate in the estimation of personal income; similarly, several reconciliation items included in line 15 are components of AGI, but they are also derived in aggregate in the estimation of AGI. Separate estimates of these reconciliation items are prepared only for reconciliation purposes. Thus, revisions to the separately estimated reconciliation items are unrelated to the revisions to personal income or to AGI, so they are carried through to the AGI gap.

Table 5. Sources of Revision to the AGI Gap, 1999

[Billions of dollars]

Line <sup>1</sup>		1999
1	Personal Income .....	9.2
2	Less: Portion of personal income not included in adjusted gross income .....	0.5
3	Nontaxable transfer payments .....	-5.9
4	Other labor income except fees .....	0.5
5	Imputed income in personal income .....	-5.3
6	Investment income retained by life insurance carriers and pension plans .....	-10.2
7	Investment income received by nonprofit institutions or retained by fiduciaries ..	4.0
8	Differences in accounting treatment between NIPA's and tax regulations, net .....	12.1
9	Other personal income exempt or excluded from adjusted gross income .....	5.2
10	Plus: Portion of adjusted gross income not included in personal income .....	27.4
11	Personal contributions for social insurance .....	0.3
12	Gains, net of losses, from sale of property .....	35.6
13	Taxable pensions .....	-1.7
14	Small business corporation income .....	6.7
15	Other types of income .....	-13.5
22	Equals: BEA-derived adjusted gross income .....	36.1
23	Adjusted gross income of IRS .....	3.9
29	Adjusted gross income (AGI) gap .....	32.2
31	Relative AGI gap (percent) .....	0.2

1. Line numbers in this table correspond to those in table 1.

AGI Adjusted gross income

BEA Bureau of Economic Analysis

IRS Internal Revenue Service

NIPA's National income and product accounts